

Report on Woody Biomass Activity in the State of Washington
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by Joe Kerkvliet

I contacted Rachael Jamison at Washington Department of Natural Resources (WDNR) (phone: 360-902-1104) on April 8, 2010 and John Tweedale, WDNR (phone 360-902-1733). Rachael summarized recent WA-supported activity in biomass utilization and John summarized recent woody biomass harvesting activity and other activity in the DNR sales division. In addition, I reviewed press announcements about woody biomass developments.

Results:

Through a combination of stimulus funds and WA funds authorized by WA HB-2165, DNR has approved and partially funded four biomass projects in the state. The projects are:

1. Borgford Energy, funded at \$771K, will promote a facility near Colville, WA to produce 9.4 MW, 2000 gallons per day of bio-oil, 14,000 pounds per day of syngas, and biochar. This project is in conjunction with a sawmill in Springdale, WA. The long-term goal is to establish 10 such facilities in the Northwest to speed up forest fuel reduction efforts.
2. Parametrix, funded at \$???, will convert biomass to liquid fuels. Located at SDS Lumber in Binder, WA, along the Columbia River.
3. Atlas Pellets, funded at \$???, will install machinery allowing the use of non-chip and sawdust woody biomass to produce wood pellets. The plant is located at Omak in northeast WA.
4. Nippon Paper, funded at \$2,000K, will replace a boiler and add a 20 MW condensing turbine generator to produce 6MW of excess power, which will be sold to the grid. The facility is located in Port Angeles, on the Olympic Peninsula

According to Rachael, the above 4 projects do not involve any stand-alone woody biomass harvesting, but will involve re-working of existing slash piles.

In addition WA HB-2481 has been signed into law. This allows WDNR to enter into long-term woody biomass supply agreements (5-20years). The law also requires such agreements to be accompanied by an “investment grade” woody biomass availability assessment that takes into account existing science and sustainability.

WA HB-2481 also requires that the WA Forest Practices Law be modified to account for the possible effects of biomass harvesting. Working groups have been formed to do this.

John reports that innovative biomass harvesting methods are being used in WA. These include the use of a mobile shredder by Herman Brothers Logging and Construction. The shredder has two articulating axles, which allow it to operate on and off-road. It produces woody biomass which is conveyed directed into a van towed behind the shredder. Another firm (unknown name) is using modified shovels to densify slash located along roadsides and sort material into chunks, hogfuel, and, occasionally, chips.

John also reports that DNR is cognizant of potential issues involving woody-biomass harvesting and that internal documents governing DNR sales on trust lands will be revisited to examine environmental issues.

John also reports that some WA woody biomass harvesting currently being conducted involves re-entry into previously logged timber sale areas.

A 55 MW woody biomass power plant has been announced for Mason County, WA. The \$250 million dollar plant will use woody biomass from local private forests, although fuel supply agreements are still being negotiated. The plant is a joint venture of John Deere and Adage (formed by Areva and Duke Energy). Woody biomass harvesting will incorporate Deere's 149D Econ-III Energy Woody Harvester into in-woods operations (see Biomass Magazine, April 2010).